CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/KRIDL/W.No.05/CSR.9/618h/CEMENT/2014-15

Date: 08.09.2014

TEST REPORT ON CEMENT

* CUSTOMER	:	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
*AGENCY	:	**Technical Manager,** KRIDL, Bangalore.
*NAME OF THE WORK	:	Improvements to Roads and Drains at Thirumenahalli to Chokkanahalli in Ward No.05, Byatarayanapura Sub Division, BBMP, Bangalore.
REFERENCE	:	AEE/BSD/BBMP/ /2014-15 Dated: 04.09.2014
SAMPLE ID	:	Cement
SAMPLE RECEIVED ON	:	04.09.2014
PERIOD OF TESTING	:	04.09.2014 to 08.09.2014

The results of the tests conducted on the cement sample are as follows:

Sl. No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	a) Initial Setting Time	IS-4031 (Part -5) 1988(RA-2009)	135 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5) 1988(RA-2009)	470 Minutes	Not More than 600 Minutes
2	Standard Consistency	IS-4031 (Part -4) 1988(RA-2009)	26.50 %	-
3	Soundness by Le Chartlier Method	IS-4031 (Part-3) 1988(RA-2009)	1 mm	Not more than 10mm

*Information is furnished by the Customer/Representative.

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VISHWANATH. I.A.
Chief Executive Officer

AE-05

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

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Job No.: CTCE/BBMP/KRIDL/W.No.05/CSR.9/618h/SAND-Gradation/2014-15 : 08.09.2014

TEST REPORT ON DETERMINATION GRADATION OF FINE AGGREGATES (SAND)

*** Customer** : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

*** Agency** : **Technical Manager,** KRIDL, Bangalroe.

*** Name of Work** : Improvements to Roads and Drains at Thirumenahalli to Chokkanahalli in Ward No.05, Byatarayanapura Sub Division, BBMP, Bangalore.

Reference : AEE/BSD/BBMP/ /2014-15 Dated: 04.09.2014

Technical Reference : IS : 2386 Part 1 - 1963 RA-2007

Sample ID : Fine Aggregates (Sand)

Sample Received on : 04.09.2014

Date of Testing : 08.09.2014

Total Wt. of Aggregates in gms **1000**

Is Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2007)			
		Zone-I	Zone-II	Zone-III	Zone-IV
10	100	0	0	100	100
4.75	94.18	90-100	90-100	90-100	95-100
2.36	83.90	60-95	75-100	85-100	95-100
1.18	60.96	30-70	55-90	75-100	90-100
600 Micron	42.53	15-34	35-59	60-79	80-100
300 Micron	27.91	5-20	8-30	12-40	15-50
150 Micron	7.33	0-10	0-10	0-10	0-15

* Information is furnished by the Customer/Representative

Remarks : This sample is under Zone-II specific limits.

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AE-01

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

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Job No.: CTCE/BBMP/KRIDL/W.No.05/CSR.9/618h/AGG/GR/2014-15 : 08.09.2014

TEST REPORT ON COARSE AGGREGATES

*** Customer** : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

*** Agency** : **Technical Manager,** KRIDL, Bangalore.

*** Name of Work** : Improvements to Roads and Drains at Thirumenahalli to Chokkanahalli in Ward No.05, Byatarayanapura Sub Division, BBMP, Bangalore.

Reference : AEE/BSD/BBMP/ /2014-15 Dated: 04.09.2014

Technical Reference : IS : 2386 Part 1 -1963 RA-2007

Sample ID : Coarse Aggregates (40mm)

Sample Received on : 04.09.2014

Date of Testing : 08.09.2014

Total Wt. of Aggregates in gms= **10000**

Is Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2007)	
		Graded	Single Sized
80	100	100	-
63	100	-	100
40	96.85	95-100	85-100
20	34.00	30-70	0-20
10	17.50	10-35	0-5
4.75	3.60	0-5	-

* Information is furnished by the Customer/Representative

Remarks : This sample is under Graded specific limits.

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Job No.: CTCE/BBMP/KRIDL/W.No.05/CC Blocks/2014-15

08.09.2014

TEST REPORT ON CEMENT CONCRETE BLOCKS

Customer : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the Work : Improvements to Roads and Drains at Thirumenahalli to Chokkanahalli in Ward No.05, Byatarayanapura Sub Division, BBMP, Bangalore.

Refernce : AEE/BSD/BBMP/ /2014-15 Dated: 04.09.2014

Size of Block : 400 mm x 200 mm x 200 mm

Cross Sectional Area : 80000 mm^2

Technical Reference : IS: 2185 (Part 1) - 2005

No. of Blocks Tested : 03

Sl.No.	Date of Sampling	Date of testing	Failure load (KN)	Compressive strength	Minimum Compressive Strength of Individual Units
			kN	N/mm^2	N/mm^2
1	06.09.2014	08.09.2014	262.5	3.28	3.2
2	06.09.2014	08.09.2014	260.7	3.26	
3	06.09.2014	08.09.2014	259.4	3.24	

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AE-05

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Job No.: CTCE/BBMP/KRIDL/W.No.05/CSR.9/618h/CUBE/2014-15 25.10.2014

TEST REPORT ON CONCRETE CUBES

* Customer	: **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
* Agency	: **Technical Manager,** KRIDL, Bangalore.
* Name of the work	: Improvements to Roads and Drains at Thirumenahalli to Chokkanahalli in Ward No.05, Byatarayanapura Sub Division, BBMP, Bangalore.
* Reference	: AEE/BSD/BBMP/ /2014-15 Dated: 04.09.2014
* Sample ID	: Drain Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
* Grade of Concrete	: M_{20}
Compressive Strength as o	: 28^{th} day
Sample Received on	: 24.10.2014

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	27.09.2014	25.10.2014	8.167	493.8	21.95
2	27.09.2014	25.10.2014	8.293	506.5	22.51
3	27.09.2014	25.10.2014	8.352	518.7	23.05

*Information is furnished by the Customer/Representative.

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TEST REPORT ON CONCRETE CUBES

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